



**CDS Connect Work Group
Meeting Summary
March 21, 2019
3:00-4:30 PM EST**

Attendees

AHRQ Sponsors	Ed Lomotan, Shafa Al-Showk
Work Group Members	Alexandra Burn, Andrey Soares, Beatriz Rocha, Bijal Shah, Bob Badgett, Danny van Leeuwen, Diane Montella, Edna Boone, Joshua Richardson, Majid Afshar, Maria Michaels, Nikhil Patel, Patrick O'Connor, Preston Lee, Randolph Barrows, Ryan Mullins, Sandra Lewis, Steve Hasley
MITRE CDS Connect Project Members	Ginny Meadows, Chris Moesel, Dave Winters, Dylan Mahalingam, Julia Afeltra, Noranda Brown, Sharon Pacchiana

The MITRE Corporation operates the Centers for Medicare & Medicaid Services (CMS) Alliance to Modernize Healthcare, a federally funded research and development center (FFRDC) dedicated to strengthening the nation's health care system. MITRE operates CAMH in partnership with CMS and the Department of Health and Human Services.

Agenda

- Welcome and brief review of meeting objectives and the agenda
- Adapting Clinical Guidelines for the Digital Age – current status and feedback
- Demonstration of Authoring Tool (AT) comments
- Enabling alternate terminology servers in the AT
- Enabling CDS Connect Artifact comments
- Closing

Action Items

- None

Meeting Summary

Welcome

MITRE started the meeting by welcoming participants and reviewing the names of work group members participating in the call. Maria Michaels then reviewed the agenda and facilitated the rest of the discussion.

Overall:

The meeting opened with a discussion of the Centers for Disease Control and Prevention (CDC) project “Adapting Clinical Guidelines for the Digital Age”. In addition, a demonstration and discussion on the new capability to add author comments in the AT was provided. Discussion was facilitated on the need to add any alternate terminology servers in the AT, as well as capturing commenter-specific information in comments made on artifacts in the Repository. During each presentation, work group member ideas, suggestions and concerns were encouraged.

Adapting Clinical Guidelines for the Digital Age, Maria Michaels (CDC)

Maria Michaels provided an overview of the CDC sponsored project, *Adapting Clinical Guidelines for the Digital Age*. Maria displayed a slide with the project’s holistic goal: “Make it easy for clinicians to do the right thing by applying guidelines in practice more easily, quickly, accurately and consistently”. This effort brings together all the stakeholders involved in the creation of clinical guidelines and the translation of those guidelines into CDS logic. It is envisioned that by working together in the development of guidelines and tools, the guidelines can be applied to patient care more easily, quickly, accurately and consistently. This method was applied to a pilot project to develop CDS for anthrax emergencies. The project team is currently working on an Implementation Guide on the *Representation of Clinical Practice Guideline Recommendations in Fast Healthcare Interoperability Resources (FHIR)*, abbreviated as “CPGonFHIR”.

Maria invited feedback from the WG. WG member comments included:

- a. A WG member congratulated Maria on this effort. He asked about how the project team was dealing with conflicts such as competing guidelines.
 - i. Maria responded that this issue was not really part of the focus for the project, but if the project helps to enable a clinician to find the information needed more easily, focusing on the standards and process, that may help.
- b. A WG member commented that he thought there was often ambiguity in the Level 2 (L2) to Level 3 (L3) process, and that by defining the value sets and associated data elements earlier in the L2 it might provide more rigor.
 - i. Maria agreed that identifying the data elements earlier helps ensure that the data elements and value sets meet the intent of the recommendation, as well as providing more clarity earlier in the process.
- c. A WG member shared that in 2017 – 2018, their organization had created 100 plus artifacts, and learned a lot in working with the guideline authors. They had attempted to impose a structure so that they could work from the narrative guideline more easily, but found it challenging for the guideline authors, who were mostly clinicians. In addition, the clinicians found it easier to go directly to L3 and then back to L2. She also observed that it took a long time to resolve ambiguities in published papers and guidelines, and within the organization.

- d. A WG member commented that this effort was a very useful rubric. He suggested that for new guideline content, the authors should start at L2 and L3 rather than the Level 1 (L1) textual document, as he felt this created some guardrails and that creating L1 artifacts created many downstream issues and was unproductive.

Demonstration of Authoring Tool (AT) Comments, Julia Afeltra (MITRE)

Julia Afeltra provided a demonstration of the new comment feature in the AT. Comments can be added to any element in inclusions, exclusions, subpopulations, or base elements. The comment text is exported in the Clinical Quality Language (CQL) code. Comments could be added for any useful information, e.g., explaining why a data element or base element was added, or to include a link to a source. In the case of a base element with an associated comment, if that same base element is used again, the comment is included, and can be edited if needed. Chris Moesel indicated that this would be in production early next week.

WG member comments:

- a. A WG member asked if the CDS Connect team had considered exporting the expression sentence into the code.
 - i. Julia commented that this was a good idea and could definitely be considered.

Enabling Alternate Terminology Servers in the AT, Chris Moesel (MITRE)

Chris Moesel opened the session by explaining that this topic had been introduced in the past, and he wanted to ask additional questions and obtain feedback on which terminology servers should be considered. He provided the following background:

- The AT currently uses the Value Set Authority Center (VSAC) to access value sets and to verify codes. The CDS Connect team heard a request in the past that it would be good if other terminology servers could be supported. If other servers were added, the approach would be to begin with support of other FHIR-based terminology servers, and then secondly, support other non-FHIR-based terminology servers.
 - The CDS Connect team may also consider support for direct entry of value set URIs. This would allow the author to add a value set that wasn't defined in VSAC.
- Chris explained that the team is having a hard time identifying other terminology servers that would be appropriate to include. Some terminology servers are proprietary, and some may not represent the right content.

Chris asked if anyone had examples of specific terminology servers that we should investigate.

- a. A WG Member mentioned that his company, that does software development, has their own internal server, and wondered if there was a way to integrate this. The inability to use their internal terminology server is a barrier to implementing a local instance of the AT and using it. He also explained that the company fully supports VSAC as well.
- b. A WG member suggested the Public Health Information Network Vocabulary Access and Distribution System (PHIN VADS)
 - i. Chris commented that PHIN VADS had been mentioned before, but there was concern about the current state of the application programming interface (API), and whether it was FHIR-based, and asked if the member had any additional information on the API. The member did not.
- c. A WG member mentioned the SOLOR project.

- i. Chris knew about the project at a high level but asked for more information.
 - ii. Another WG member mentioned that SOLOR wasn't a server, it was just content, and that they had just issued a Request for Information to potentially implement a server.
- d. A WG member suggested Onto Server.
 - i. Chris is aware of Onto Server, which is based out of Australia and free to use for Australians, but to use it would require a license. He asked if others thought there was enough content that's not available in VSAC to make it worthwhile. He also mentioned that ideally, we'd like to use terminology servers that are open and available.
 - ii. A WG member mentioned that the Healthcare Services Platform Consortium (HSPC) used Onto Server for a while but decided not to use it.
- e. A WG member wondered if the military health, Department of Defense (DOD), or Veterans Affairs (VA) used any terminology servers to consider, but no one was aware of any.

Chris asked if direct entry of a Value Set uniform resource identifier Uniform Resource Identifier (URI) was useful? He mentioned this would impact the ability to test the artifact, in not being able to resolve the URI to find the codes. No one responded. He asked the WG members to send him any additional thoughts on this topic.

Enabling CDS Connect Artifact Comments , Ginny Meadows (MITRE)

Ginny Meadows provided background from previous discussions regarding allowing comments from artifact consumers. Anonymous comments would not be allowed, to align with the Trust Framework's recommendations on conveying trust in CDS Connect. Thus, this would require a new type of account holder, for entering comments to a hosted artifact on the Repository. (Currently only artifact contributors and AT users are required to have accounts.)

Ginny asked the WG members to consider what types of commenter information should display with the comment:

- First and last name
- First name and last name initial
- First initial and last name
- OR one of the above plus an email address? An email address, alone, is not sufficient as it can be anonymous

Ginny invited the WG members to comment on these choices.

- a. A WG member asked about the responsibility of the artifact author to respond to the comment. Other WG members also agreed that this was a concern.
- b. A WG member asked who would be able to have an account and pose a comment? Would that person be authenticated? Dave Winters confirmed this.
- c. A WG member suggested that only the artifact author should be able to see the email address of the commenter. There was concern raised by other WG members regarding the ability of the general public to view the email address of a commenter.
- d. A WG member suggested using the Apple model of moderated comments, as well as the ability to rate things.
 - i. Dave mentioned that we had discussed the moderation previously, and before anything was published it would need to be reviewed in some way.
- e. A WG member mentioned that a contributor feedback dashboard would be fantastic.

Open Discussion and Closeout

No one had any additional discussion, and the meeting was adjourned.